

IN THE CLAIMS:

1. (Currently Amended) A manufacturing method of a display device comprising:
selectively forming a pattern comprising a composition which is emitted by use of
droplet emitting means over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger;
baking the pattern; and
carrying out plasma processing to the baked pattern by use of atmospheric plasma
processing means,

wherein the droplet emitting means comprises a droplet emitting head in which a
plurality of droplet emitting holes are disposed in a line form, and

wherein the atmospheric plasma processing means comprises plasma generating
means under ~~atmospheric pressure or vicinity of atmospheric pressure~~ 5 Torr to 800 Torr.

2. (Currently Amended) A manufacturing method of a display device comprising:
forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the
transistor comprising a gate electrode, a gate insulating film, and a semiconductor layer that
has a source region, a drain region, and a channel region; and
forming a pixel electrode that is electrically connected to one of the source region and
the drain region,

wherein the gate electrode is formed by:

selectively forming a ~~wiring~~ pattern including a metal material by use of
droplet emitting means;

selectively forming a resist by use of droplet emitting means, over the ~~wiring~~
pattern; and

etching the ~~wiring~~ pattern by use of atmospheric plasma; and

ashing the resist by use of atmospheric plasma processing means after etching
the ~~wiring~~ pattern,

wherein the droplet emitting means comprises a droplet emitting head in which a
plurality of droplet emitting holes are disposed in a line form, and

wherein the atmospheric plasma processing means comprises plasma generating
means under ~~atmospheric pressure or vicinity of atmospheric pressure~~ 5 Torr to 800 Torr.

3. (Currently Amended) A manufacturing method of a display device comprising:

forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the transistor comprising a gate electrode, a gate insulating film, a source electrode, a drain electrode, and a semiconductor layer that has a source region, a drain region, and a channel region; and

forming a pixel electrode that is electrically connected to one of the source region and the drain region,

wherein the source electrode and the drain electrode are formed by:

selectively forming a pattern including a metal material by use of droplet emitting means;

selectively forming a resist by use of droplet emitting means; ~~and~~

~~baking the resist;~~

~~etching an electric conductive film which is disposed under the baked resist~~
the pattern by use of atmospheric plasma processing means; and

ashing the ~~baked~~ resist by use of atmospheric plasma processing means,

wherein the droplet emitting means comprises a droplet emitting head in which a plurality of droplet emitting holes are disposed in a line form, and

wherein the atmospheric plasma processing means comprises plasma generating means under ~~atmospheric pressure or vicinity of atmospheric pressure~~ 5 Torr to 800 Torr.

4. (Currently Amended) A manufacturing method of a display device comprising:

selectively forming a pattern comprising a composition which is emitted by use of droplet emitting means over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger; ~~and~~

baking the pattern; and

carrying out plasma processing to the baked pattern by use of plasma processing means for carrying out local plasma processing,

wherein the droplet emitting means comprises a droplet emitting head in which one or a plurality of droplet emitting holes are disposed, and

wherein the plasma processing means for carrying out local plasma processing comprises plasma generating means under ~~atmospheric pressure or the vicinity of atmospheric pressure~~ 5 Torr to 800 Torr.

5. (Currently Amended) A manufacturing method of a display device comprising:
forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the transistor comprising a gate electrode, a gate insulating film, and a semiconductor layer that has a source region, a drain region, and a channel region; and
forming a pixel electrode that is electrically connected to one of the source region and the drain region,
wherein the gate electrode is formed by:
selectively forming a wiring pattern including a metal material by use of droplet emitting means;
selectively forming a resist by use of droplet emitting means, over the wiring pattern;
etching the wiring pattern by use of atmospheric plasma for carrying out local plasma processing; and
ashing the resist by use of plasma processing means for carrying out local plasma processing, after etching the wiring pattern,
wherein the droplet emitting means comprises a droplet emitting head in which ~~one or~~ a plurality of droplet emitting holes are disposed, and
wherein the plasma processing means for carrying out local plasma processing comprises plasma generating means under ~~atmospheric pressure or the vicinity of atmospheric pressure~~ 5 Torr to 800 Torr.

6. (Currently Amended) A manufacturing method of a display device comprising:
forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the transistor comprising a gate electrode, a gate insulating film, a source electrode, a drain electrode, and a semiconductor layer that has a source region, a drain region, and a channel region; and
forming a pixel electrode that is electrically connected to one of the source region and the drain region,
wherein the source electrode and the drain electrode are formed by:
selectively forming a wiring pattern including a metal material by use of a droplet

emitting means;

selectively forming a resist by use of a droplet emitting means, over the ~~wiring~~
pattern; and

etching the ~~wiring~~ pattern by use of plasma processing means for carrying out local
plasma processing; and

ashing the resist by use of plasma processing means for carrying out local plasma
processing, after etching the ~~wiring~~ pattern,

wherein the droplet emitting means comprises a droplet emitting head in which ~~one or~~
a plurality of droplet emitting holes are disposed, and

wherein the plasma processing means for carrying out local plasma processing
comprises plasma generating means under ~~atmospheric pressure or the vicinity of~~
~~atmospheric pressure~~ 5 Torr to 800 Torr.

7.-9. (Canceled)

10. (Currently Amended) A manufacturing method of a display device comprising:

forming a groove in an insulating film formed on a glass substrate having a size of
1000 × 1200 mm² or larger;

emitting a wiring material in the groove, by use of droplet emitting means to form a
wiring in the groove,

wherein the droplet emitting means comprises a droplet emitting head in which a
plurality of droplet emitting holes are disposed in a line form, and

wherein the droplet emitting head moves along the groove when emitting the wiring
material.

11. (Currently Amended) A manufacturing method of a display device comprising:

forming a groove in an insulating film formed on a glass substrate having a size of
1000 × 1200 mm² or larger;

emitting a wiring material in the groove, by use of droplet emitting means to form a
wiring in the groove;

wherein the droplet emitting means comprises a droplet emitting head in which one or

a plurality of droplet emitting holes are disposed in a line form, and

wherein the droplet emitting head moves along the groove when emitting the wiring material.

12.-13. (Canceled)

14. (Currently Amended) A manufacturing method of a display device comprising:

~~selectively forming an electric conductive film, which becomes a wiring, on a substrate, by emitting a composition by use of droplet emitting means;~~

~~forming a resist pattern by emitting a resist on the electric conductive film by use of the droplet emitting means;~~

~~etching the electric conductive film with the resist pattern as a mask, by use of plasma processing means; and~~

~~ashing the resist pattern by use of the plasma processing means, to form a wiring;~~

forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the transistor comprising a gate electrode, a gate insulating film, a source electrode, a drain electrode, and a semiconductor layer that has a source region, a drain region, and a channel region; and

forming a pixel electrode that is electrically connected to one of the source region and the drain region,

wherein the gate electrode is formed by:

selectively forming a first pattern including a metal material by use of droplet emitting means;

selectively forming a first resist by use of droplet emitting means, over the first pattern;

etching the first pattern by use of atmospheric plasma; and

ashing the first resist by use of atmospheric plasma processing means after etching the first pattern,

wherein the source electrode and the drain electrode are formed by:

selectively forming a second pattern including a metal material by use of droplet emitting means;

selectively forming a second resist by use of droplet emitting means;
etching the second pattern by use of atmospheric plasma processing means;
and
ashing the second resist by use of atmospheric plasma processing means,
wherein the droplet emitting means comprises a droplet emitting head in which a plurality of droplet emitting holes are disposed in a line form, and
wherein the plasma processing means comprises plasma generating means under atmospheric pressure or the vicinity of atmospheric pressure 5 Torr to 800 Torr.

15. (Currently Amended) A manufacturing method of a display device comprising:
~~selectively forming an electric conductive film, which becomes a wiring, on a substrate, by emitting a composition by use of droplet emitting means;~~
~~forming a resist pattern by emitting a resist on the electric conductive film by use of the droplet emitting means;~~
~~etching the electric conductive film with the resist pattern as a mask, by use of plasma processing means, and~~
~~ashing the resist pattern by use of the plasma processing means, to form a wiring;~~
forming a transistor over a substrate having a size of $1000 \times 1200 \text{ mm}^2$ or larger, the transistor comprising a gate electrode, a gate insulating film, a source electrode, a drain electrode, and a semiconductor layer that has a source region, a drain region, and a channel region; and
forming a pixel electrode that is electrically connected to one of the source region and the drain region,
wherein the gate electrode is formed by:
selectively forming a first pattern including a metal material by use of droplet emitting means;
selectively forming a first resist by use of droplet emitting means, over the first pattern;
etching the first pattern by use of atmospheric plasma for carrying out local plasma processing; and
ashing the first resist by use of plasma processing means for carrying out local

plasma processing, after etching the first pattern,

wherein the source electrode and the drain electrode are formed by:

selectively forming a second pattern including a metal material by use of a droplet emitting means;

selectively forming a second resist by use of a droplet emitting means, over the second pattern;

etching the second pattern by use of plasma processing means for carrying out local plasma processing; and

ashing the second resist by use of plasma processing means for carrying out local plasma processing, after etching the second pattern,

wherein the droplet emitting means comprises a droplet emitting head in which ~~one or~~ a plurality of droplet emitting holes are disposed in a line form, and

wherein the plasma processing means comprises plasma generating means under ~~atmospheric pressure or the vicinity of atmospheric pressure for carrying out local plasma processing~~ 5 Torr to 800 Torr.

16. (Previously Presented) A manufacturing method of a display device according to claim 1, wherein the droplet comprises any one of a photosensitive resist, a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

17. (Currently Amended) A manufacturing method of a display device according to claim 2, wherein the droplet for the resist comprises a photosensitive resist, and the droplet for the wiring pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

18. (Currently Amended) A manufacturing method of a display device according to claim 3, wherein the droplet for the resist comprises a photosensitive resist, and the droplet for the pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic

liquid solution which includes the metal material.

19. (Previously Presented) A manufacturing method of a display device according to claim 4, wherein the droplet comprises any one of a photosensitive resist, a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

20. (Currently Amended) A manufacturing method of a display device according to claim 5, wherein the droplet for the resist comprises a photosensitive resist, and the droplet for the ~~wiring~~ pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

21. (Currently Amended) A manufacturing method of a display device according to claim 6, wherein the droplet for the resist comprises a photosensitive resist, and the droplet for the pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

22. (Canceled)

23. (Previously Presented) A manufacturing method of a display device according to claim 10, wherein the droplet for the wiring comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

24. (Previously Presented) A manufacturing method of a display device according to claim 11, wherein the droplet for the wiring comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

25.-26. (Canceled)

27. (Currently Amended) A manufacturing method of a display device according to claim 14, wherein the droplet for at least one of the first resist and the second resist pattern comprises a photosensitive resist, and the droplet for at least one of the ~~wiring~~ first pattern and the second pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.

28. (Currently Amended) A manufacturing method of a display device according to claim 15, wherein the droplet for at least one of the first resist and the second resist pattern comprises a photosensitive resist, and the droplet for at least one of the ~~wiring~~ first pattern and the second pattern comprises any one of a paste form metal material or organic liquid solution which includes the paste form metal, a ultra-fine particle form metal material or organic liquid solution which includes the metal material.